Applicant

Charles C. Frost

Serial No. :

10/723,970

Page

13

Remarks:

The amendments and remarks presented herein are believed to be fully responsive to the Office Action dated June 16, 2004.

Claims 1-38 are pending in the application. Claims 1, 11, 12, 14, 17, 20 and 21 have been amended as set forth above. The specification and drawings have been amended to overcome the objections discussed below. The amendments are fully supported in the specification and drawings as originally filed. No new matter has been added.

ALLOWED CLAIMS

Claims 28-38 are allowed.

ALLOWABLE CLAIMS

Claims 11, 12, 17, 18 and 20-27 were indicated as being directed toward allowable subject matter and as being allowable if rewritten in independent form.

Applicant has amended claims 11, 12 and 20 to be in independent form, such that claims 11, 12 and 20-27 are now in condition for allowance.

OBJECTIONS TO THE DRAWINGS

The drawings were objected to as failing to comply with 37 C.F.R. 1.84 (p)(4) because reference character "20" was used to designate both a bolt and other fastener.

Applicant has amended the specification as set forth above to refer to "bolt 20 or other fastener." Withdrawal of the objection is thus respectfully requested.

The drawings were also objected to under 37 C.F.R. 1.83(a) because they did not show the flared portion 18a' as described in the specification. Applicant submits the attached corrected drawing for Figure 3 which includes the new number 18a' and reference

Applicant : Charles C. Frost

Serial No. :

10/723,970

Page

14

line, such that the drawings now show the reference numeral 18a' as described in the specification. Entry and approval of the replacement Figure 3 and withdrawal of the objection is thus respectfully requested.

OBJECTION TO THE SPECIFICATION

The specification was objected to because the part number "217a" in Figure 5 was not discussed in the specification. Applicant has amended the specification as set forth above to include the reference number 217a at the appropriate location in the specification. The objection to the specification is thus obviated and withdrawal of the objection is respectfully requested.

CLAIM OBJECTIONS

Claims 17 and 20 were objected to because of informalities. Applicant has amended claims 17 and 20 as set forth above to clarify that the first mating surface slidably engages the second mating surface of the other sliding member. Withdrawal of the objections is respectfully requested.

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CLAIM REJECTIONS

Claims 1-7, 13-16 and 19 were rejected under 35 U.S.C. §102(b) as being anticipated by McMullen, U.S. Patent No. 5,398,618. Claims 7, 8 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over McMullen, in view of Vanmeenen et al., U.S. Patent No. 6,241,082, while claim 9 was rejected under 35 U.S.C. §103(a) as being unpatentable over McMullen.

Applicant respectfully traverses the rejections of the claims for the reasons set forth below.

Applicant

Charles C. Frost

Serial No.

10/723,970

Page

15

Independent claim 1 has been amended to clarify that the radial projection is positioned inward of the ends of the wheel portion and the hub portion, and that the mating surface of the wheel portion and/or hub portion substantially encompasses the radial projection of the sliding member.

Independent claim 14 has been amended to clarify that the at least one ring shaped portion has a longitudinally arcuate first mating surface that slidably engages a generally correspondingly formed longitudinally arcuate second mating surface.

Applicant submits that McMullen, either alone or in combination with any other cited reference, does not disclose, teach or suggest the trolley wheel assembly of the present invention, particularly as set forth in independent claims 1 and 14 and in the claims depending therefrom. McMullen discloses a conveyor trolley wheel assembly having a bearing (12) that has a radially extending flange (19) which is accommodated in an annular recess (20) at each end of the wheel body. The bearing (12) is attached to the wheel body (11) and has "an inherent dry coefficient of friction adapted to permit rotation of said dry bearing means on said shaft member means whereby said wheel body rotates during rolling along said guide track". See McMullen, column 2, lines 25-29. The bearing means of McMullen thus rotates on the mounting shaft of the wheel assembly, and the sliding surface of the bearing of McMullen is thus defined along the surface that engages the shaft means. The sliding surface of McMullen is longitudinally straight along the shaft means and across the entire length of the wheel body. The sliding surface of McMullen thus does not include a radial projection that slidably mates with a correspondingly formed sliding surface of the shaft means and that is positioned inward of the ends of the wheel body and shaft means. Nor does the sliding surface of the shaft means of McMullen substantially encompass such a radial projection of the sliding surface of the bearing.

In stark contrast to McMullen, the trolley wheel assembly of the present invention includes at least one sliding member that has a mating surface defining a radial projection that slidably mates with a generally correspondingly formed mating surface of the wheel portion or hub portion. The radial projection is positioned inward of the ends of the

Applicant :

Charles C. Frost

Serial No. :

10/723,970

Page

16

wheel portion and hub portion, and the correspondingly formed mating surface of the wheel portion or hub portion substantially encompasses the radial projection of the sliding member. Therefore, Applicant respectfully submits that McMullen, either alone or in combination with any prior art of record, does not disclose, teach or suggest the trolley wheel assembly of the claimed invention, particularly as set forth in independent claim 1 and the claims depending therefrom.

With respect to independent claim 14, Applicant submits that McMullen does not disclose a sliding member having at least one ring shaped portion having a longitudinally arcuate first mating surface that slidably engages a generally correspondingly formed longitudinally arcuate second mating surface of the hub portion, wheel portion and/or another sliding member. As shown in the figures of McMullen, the sliding surface of the bearing means is longitudinally straight along the straight surface of the shaft portion. The bearing of McMullen thus does not have a longitudinally arcuate mating surface for engaging a correspondingly formed longitudinally arcuate mating surface of the shaft portion or wheel portion. Therefore, Applicant respectfully submits that McMullen, either alone or in combination with any other cited reference, does not disclose, teach or suggest the trolley wheel assembly of the present invention, particularly as set forth in independent claim 14 and the claims depending therefrom.

With respect to the rejections of claims 7-10 under 35 U.S.C. §103(a), Applicant submits that McMullen, either alone or in combination with Vanmeenen et al., does not disclose, teach, suggest or render obvious the claimed invention for at least all of the reasons set forth above. Moreover, with respect to Vanmeenen et al., Applicant submits that the wheel (8) of Vanmeenen et al. includes two parts (12 and 13) that are "both made of composite material and positively connected by means of fixing means (14, 15) which completely immobilize the two parts of the wheel relative to one another." See Vanmeenen et al., column 4, lines 41-44. Likewise, the flange (18) of the inner bore (17) of the wheel "allows the outer cage (21) of a roller bearing (20) to be clipped on tightly and completely immobilized." See Vanmeenen et al., column 5, lines 43-47. The central core (13) of the wheel of Vanmeenen et al. thus does not slidably mate with a corresponding formed mating

Applicant :

Charles C. Frost

Serial No.

10/723,970

Page

17

surface, since the inner core is fixed to the outer wheel portion at its outer surface and to the roller bearing at its inner surface. Therefore, Applicant submits that Vanmeenen et al. actually teaches away from the present invention by providing a wheel with a fixed central core that does not slidably mate with a correspondingly formed mating surface. Thus, it would not have been obvious to apply the teachings of Vanmeenen et al. to the teachings of McMullen, especially since to do so may adversely affect the purpose and function of the wheel of McMullen.

Therefore, Applicant respectfully submits that McMullen, either alone or in combination with Vanmeenen et al. or any other cited reference, does not disclose, teach, suggest or render obvious the trolley wheel assembly of the claimed invention. Reconsideration and withdrawal of the rejections of claims 1-10, 13-16 and 19 is respectfully requested.

Claims 1-38 remain pending in the application. Claims 1, 11, 12, 14, 17, 20 and 21 have been amended above. Claims 28-38 are allowed. Applicant respectfully submits that claims 1-28 are also in condition for allowance and a notice to that effect is earnestly and respectfully requested.

Respectfully submitted,

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Applicant : Charles C. Frost

Serial No. : 10/723,970

Page

Amendments to the Drawings:

The drawings were objected to under 37 CFR 1.83(a) because they failed to show each reference number described in the specification. Figure 3 has been amended to add the reference number 18a' at the flared portion of the support arm so that the drawings show what is described in the specification.

A new corrected drawing sheet showing the corrected Figure 3 is attached.